

ABSTRACT

An optical pickup (20) projects a read beam onto an optical disc (40) as an optical storage medium which is driven to rotate by a spindle motor (30) and receives its reflection. A laser beam from a laser producing element (21) passes through a liquid crystal panel (25) and guided to an objective lens (26). The panel (25) is provided to correct spherical aberration caused by an irregular thickness of a transparent substrate of the optical disc (40). A control circuit (50) changes a spherical aberration correction signal SA to carry out sampling more than once, covering a range of the output of an optical sensor (31) where the output shows large changes. The circuit (50) determines the position of a peak of an approximation curve through calculation and designates that position as the magnitude of correction. Thus, the optical pickup (20) can quickly and accurately detect the magnitude of the correction of the spherical aberration caused by an irregular thickness of the optical disc (40).